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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,326	01/09/2001	Sunderarajan G. Karaikurichi	31008.P031	5497

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EXAMINER

KASENGE, CHARLES R

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/757,326	KARAIKURICHI, SUNDERARAJAN G.	
	Examiner	Art Unit	
	Charles R. Kasenge	2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,10-12 and 14-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4,10,14,16,18 and 20 is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8,11,12,15,17,19,21 and 22 is/are rejected.
- 7) ☒ Claim(s) 23-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/4/05 have been fully considered but they are not persuasive. Although Applicant disagrees, the Office reasserts that in regards to claims 1, 7, and 11, Kleyman discloses a method wherein translating an assembly constraint includes: identifying one or more geometry elements in the first representation that are constrained by the assembly constraint, identifying one or more corresponding geometry elements in the second representation and applying the assembly constraint to the one or more corresponding geometry elements in the second representation (pg. 1 and 2, ¶12 and 13). Kleyman's source format is the first representation and Kleyman's target format is the second representation (pg. 1, ¶12). Also, in regards to claims 15, 17, and 19, the source representation is understood to be the pre-translation representation. Kleyman demonstrates the geometric structure being composed of a plurality of elements, the first and second element. The elements are constrained by a constraint, which is analogous to Applicant's assembly constraint (pg. 2, ¶12). Furthermore Kleyman states, "the step of enhancing the target format representation by incorporating into it certain constraints on the constituent elements of the structure that are expected to be satisfied in the source format representation of the geometric structure (pg. 1, ¶12)." Since Kleyman explicitly says the constraints are expected to be satisfied in the source format and the target format, it is interpreted that these constraints are translated in the translation process.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 5-8, 11, 12, 15, 17, 19, 21, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Kleyman U.S. Patent Application 2003/0156127. Referring to claims 1, 7, 11, 15, 17, and 19, Kleyman discloses a computer implemented method comprising: first translating a first representations of parts or sub-assemblies of a mechanical design assembly into a second, different representations of the parts or sub-assemblies of the mechanical design assembly (pg. 1, paragraph 12) and thereafter, translating one or more assembly constraints of the mechanical design assembly, where each assembly constraint defines an association between two or more parts or sub-assemblies of the mechanical design assembly and where translating assembly constraints includes: identifying one or more geometry elements in the first representation that are constrained by the assembly constraint, identifying one or more corresponding geometry elements in the second representation and applying the assembly constraint to the one or more corresponding geometry elements in the second representation (pg. 1, paragraph 12).

Referring to claims 2, 8, and 12, Kleyman discloses the method of claim 1,

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wherein translating a first representation of parts or sub-assemblies into a second representation comprises tracking correspondence between the first and second representations during the translation (pg. 1, paragraph 12).

Referring to claims 5 and 6, Kleyman discloses the method of claim 1, wherein said one or more assembly constraints comprise a selected one of a mating constraint and a flush constraint constraining on at least a first and a second sub-assembly or part of said mechanical design assembly (pg. 3, paragraph 37). Kleyman discloses the method of claim 1, wherein said one or more assembly constraints comprise a selected one of an angle constraint and a rotational constraint constraining on at least a first and a second sub-assembly/pad of said first plurality of sub-assemblies/pads (pg. 3, paragraph 37). The Office interprets the boundary constraints as “mating” constraints.

Referring to claims 21 and 22, Kleyman discloses the method of claim 1, wherein: translating a first representation of parts or sub-assemblies into a second representation includes changing a modeling approach from a first modeling approach used to generate the first representation to as second modeling approach used to generate the second representation (pg. 1, paragraph 12).

Allowable Subject Matter

4. Claims 4, 10, 14, 16, 18, and 20 are allowed.
5. Claim 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R. Kasenge whose telephone number is 571 272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "L. P. Picard", is written in a cursive style.

CK
October 13, 2005

**LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**